State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-59 Relating to Certification of New Heavy-Duty Motor Vehicle Engines

VOLVO TRUCK CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Volvo Truck Corporation 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Engine Family		lacement Cubic Inches)	Exhaust Emission Control Systems (Special Features)
LVT12.0FPA2	12.0	(730)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LVT06.7FPA3	6.7	(409)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)
LVT05.5FPA0	5.5	(334)	Smoke Puff Limiter (Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates <u>gm/bhp-hr</u>
1.3	15.5	6.0	0.60

The following are the certification emission values for these engine families:

Engine Family	Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr	Particulates gm/bhp-hr
LVT12.0FPA2	0.6	1.6	5.7	0.51
LVT06.7FPA3	0.9	3.5	5.4	0.54
LVT05.5FPA0	1.0	3.1	5.8	0.44

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Health and Safety Code Section 43205.5 and Title 13, California Code of Regulations, Section 2036).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this _____ day of February, 1990.

K. D. Drachand, Chief Mobile Source Division

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

HHDD

Hanufacturer Volvo Truck Corporation Engine Family LVT12.0FPA2

Liter (CID) 12.0 (730) Eng. Type L-6

Emission Control Sys. and (Special Features) SPL, (CAC,TC)

TD122FIQ Bosch 478451 Bosch 325 187 1150 222 (87.1) TD122FKQ Bosch Bosch 345 199 1170 222 (87.1) TD122FPQ Bosch Bosch 365 209 1200 (87.1) TD122FPQ Bosch Bosch 365 209 1200 (90.5) TD122FIQ Bosch Bosch 300 174 1000 193 175.7)	Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Numbe	Maximum Rated HP rat RPM	Fuel Rate mm3/stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
TD122FKQ Bosch 478491 Bosch 422954 1900 (123.6) 1200 (87.1) TD122FPQ Bosch 478451 Bosch 422954 1900 (130.4) 1200 (90.5) TD122FTQ Bosch 300 174 1000 193 (75.7)	1D155E10			1	4		
TD122FPQ Bosch 478451 Bosch 422954 1900 (130.4) 1200 (90.5) TD122FTQ Bosch 300 174 1000 193 (75.7)	TD122FKQ						(87.1)
TD122FTQ Bosch Bosch 300 (75.7)	TD122FPQ						(90.5)
478490 422954 1900 (108.0)	TD122FTQ	Bosch 478490	Bosch 42295 4	300 1900	174 (108.6)	1000 1200	193 (75.7)
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Manufactur	er Volvo Truc	ck Corporatio	<u>1</u> E	ngine F	amily _	LVT06.7F	PA3
Liter (CID	6.7 (409	9)	Eng	. Type		L-6	
Emission C	Control Sys. ar	nd (Special F	eatures)_	SPL, (CAC,	TC)	
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Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Rated HP		Rate troke Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
D71FCQ	Bosch 477138	Bosch 421479	225 2400	11. (88.		605 1400	125 (57.1)
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Manufactur	ėr <u>Volvo Tru</u> c	k Corporation	<u> </u>	ngine Family _	LVT05.5	FPAO
				. Type		
Emission C	ontrol Sys. an	nd (Special F	eatures)_	SPL, (CAC,	TC)	
			<u> </u>			
Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Rated HP	Fuel Rate mm ³ /stroke (lbs/Hr)		Fuel Rate mm ³ /stroke (lbs/Hr)
TD61FBQ	Bosch 420800	Bosch 465872	200 2800	90 (82.2)	465 1700	98 (54.6)
TD61FHQ	Bosch 420801	Bosch 465872	170 2800	77 (71.1)	415 1700	85 (47.2)
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